CLAIMS

1. A system for steering a beam of electromagnetic energy comprising:

first means for receiving an input wavefront of electromagnetic energy along a first axis, said first means including means for refracting said input wavefront as an output wavefront along a second axis at an angle with respect to said first axis in response to an applied voltage;

second means for providing said voltage in response to a control signal; and third means for providing said control signal.

- 2. The invention of Claim 1 wherein the index of refraction of said first means varies in response to said applied voltage.
 - 3. The invention of Claim 2 wherein said first means is a liquid crystal device.
- 4. The invention of Claim 3 wherein said first means includes an array of liquid crystal devices.
- 5. The invention of Claim 1 further including means for restoring color balance to said output wavefront.
- 6. The invention of Claim 5 wherein said means for restoring color balance to said output wavefront includes at least one optical wedge.
- 7. The invention of Claim 6 wherein said means for restoring color balance to said output wavefront includes first and second counter-rotating optical wedges.
- 8. The invention of Claim 7 further including a mirror for compensating a wavefront output by said first and second counter-rotating optical wedges.



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- 9. The invention of Claim 8 further including an imaging lens.
- 10. The invention of Claim 1 wherein said third means is a microprocessor.
- 11. A system for steering a beam of electromagnetic energy comprising:

an array of liquid erystal devices for receiving an input wavefront of electromagnetic energy along a first axis and refracting said input wavefront as an output wavefront along a second axis at an angle with respect to said first axis in response to an applied voltage;

a microprocessor for providing said voltage;

first and second counter-rotating wedges, responsive to said microprocessor for processing said output wavefront;

a mirror, responsive to said microprocessor, for reflecting a wavefront output by said first and second counter-rotating optical wedges; and

means for outputting an image reflected by said mirror.

- 12. The invention of Claim 11 wherein the index of refraction of said array varies in response to said applied voltage.
- 13. A method for steering a beam of electromagnetic energy comprising the steps of:

providing a control signal;

providing a voltage in response to said control signal; and

receiving an input wavefront of electromagnetic energy along a first axis and refracting said input wavefront as an output wavefront along a second axis at an angle with respect to said first axis in response to said voltage.

14. A method for steering multiple beams of electromagnetic energy comprising the steps of:

providing control signals;

providing a plurality of voltages in response to said control signals; and receiving multiple input wavefronts of electromagnetic energy along a first axis and refracting each said input wavefronts as an output wavefront along a second axis at angles with respect to said first axis in response to said voltages.